An Overview of Functions in the metafor Package

last updated: Nov 22 2014
(not all functions documented)

escalc()
- read in data from ASCII file
- see also ‘foreign’ package for reading in other data formats

read.table()
read.csv()
read.delim()

rma.uni() = fixed- and random/mixed-effects models
("inverse-variance" method; normal-normal models)
rma.mh() = Mantel-Haenszel method (fixed-effects model)
rma.peto() = Peto’s method (fixed-effects model)
rma.glmm() = fixed- and random/mixed-effects models
(binomial-normal and Poisson-normal models)
rma.mv() = fixed- and random/mixed-effects multivariate/multilevel models
(normal-normal models)

residuals()...

print()...
summary()...

yi = observed outcomes or effect size estimates
vi = corresponding sampling variances

tyi = observed outcomes or effect size estimates
vi = corresponding sampling variances

test functions
- fitted() predict() blup()
- residuals() rstandard() rstudent() hatvalues() weights() influence() leave1out()
- ranktest() regtest() trimfill() hcl()
- confint() anova() permutest()...
- forest() funnel() labbe() radial() qqnorm() baujat() plot()...
- logLik() deviance() AIC() BIC() coef() vcov()...

note: rma.uni() takes either ‘yi’ and ‘vi’ as input or one can supply the required data to calculate the desired effect size or outcome measure for the meta-analysis directly; rma.mh(), rma.peto(), and rma.glmm() require that the raw counts are supplied; rma.mv() takes ‘yi’ and ‘V’ as input (V is the variance-covariance matrix of the sampling errors / residuals)

print() summary()...

note: class of fitted model object is the same as the function name; so print() for an object of class ‘rma.uni’ actually calls print.rma.uni() and so on

note: blup() only for ‘rma.uni’ objects

note: all functions implemented for ‘rma.uni’ objects; coverage of functions for other objects is more limited (see docs)

note: regtest() not for ‘rma.glmm’ or ‘rma.mv’ objects; trimfill() and hcl() only for ‘rma.uni’ objects

note: confint() not for ‘rma.glmm’ or ‘rma.mv’ objects; anova() only for ‘rma.uni’ and ‘rma.mv’ objects; permutest() only for ‘rma.uni’ objects;

note: forest() can also take ‘yi’ and ‘vi’ directly as input; qqnorm(), baujat(), and plot() not for ‘rma.glmm’ or ‘rma.mv’ objects

note: coef() also for ‘permutest.rma.uni’ and ‘summary.rma’ objects

note: restrictions may change with future updates